

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims

1. (Currently amended) An antifusogenic peptide-albumin conjugate comprising:
an anti-fusogenic peptide comprising a maleimide containing group and an amino acid sequence, wherein said sequence is selected from the group consisting of SEQ ID NO:1, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541, wherein said sequence exhibits an anti-viral and antifusogenic activity against human immunodeficiency virus (HIV) and said peptide is covalently bonded to cysteine 34 of albumin through said maleimide containing group to form said peptide-albumin conjugate wherein the ratio of peptide to albumin in said conjugate is 1:1, and wherein said maleimide containing group is attached to said peptide without a linker or via a (2-amino)ethoxy acetic acid (AEA) or a [2-(2-amino) ethoxy] acetic acid (AEEA) linker.
2. (Cancelled)
3. (Cancelled)
4. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO:1.
5. (Cancelled)
6. (Previously presented) An anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4,

SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541.

7.-18. (Cancelled)

19. (Currently amended) A composition for use in the treatment of acquired immune deficiency syndrome (AIDS) comprising, in a physiologically acceptable medium, an anti-fusogenic peptide-albumin conjugate comprising an anti-fusogenic peptide comprising a maleimide containing group and an amino acid sequence wherein said sequence is selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541, wherein said sequence inhibits an anti-viral and anti-fusogenic activity against human immunodeficiency virus (HIV) and said peptide is covalently bonded to cysteine 34 of albumin through said maleimide containing group to form said anti-viral peptide-albumin conjugate, wherein the ratio of peptide to albumin in said conjugate is 1:1, wherein said maleimide containing group is attached to said peptide without a linker or via a (2-amino)ethoxy acetic acid (AEA) or a [2-(2-amino)ethoxy] acetic acid (AEEA) linker.

20. (Cancelled)

21. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO:1.

22.-30. (Cancelled)

31. (Previously presented) The composition of claim 19, wherein said amino acid sequence is selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO:

536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541.

32.-35. (Cancelled)

36. (Previously presented) A composition comprising the anti-fusogenic peptide-albumin conjugate of claim 1 in a physiologically acceptable medium.

37. (Cancelled)

38. (Previously presented) The composition of claim 36, wherein said amino acid sequence is SEQ ID NO:1.

39. (Previously presented) The composition of claim 36, wherein said amino acid sequence is selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO: 117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:534; SEQ ID NO:535, SEQ ID NO:536; SEQ ID NO:537, SEQ ID NO:538, SEQ ID NO:539, SEQ ID NO:540, and SEQ ID NO: 541.

40.-58. (Cancelled)

59. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said albumin is serum albumin.

60. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 59, wherein said albumin is human serum albumin.

61. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO:3.

62. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO:4.

63. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 5.

64. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 117.

65. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 118.

66. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 119.

67. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 534.

68. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 535.

69. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 536.

70. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 537.

71. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 538.

72. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 539.

73. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 540.

74. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein said amino acid sequence is SEQ ID NO: 541.

75. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 3.

76. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 4.

77. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 5.

78. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 117.

79. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 118.

80. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 119.

81. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 534.

82. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 535.

83. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 536.

84. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 537.

85. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 538.

86. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 539.

87. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 540.

88. (Previously presented) The composition of claim 19, wherein said amino acid sequence is SEQ ID NO: 541.

89. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein the maleimide containing group is maleimidopropionic acid (MPA) or gamma-maleimide-butyralamide (GMBA).

90. (Currently amended) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein the maleimide containing group is attached to the peptide via a linking group the (2-amino)ethoxy acetic acid (AEA) or the [2-(2-amino)ethoxy] acetic acid (AEEA) linker.

91. (Cancelled) ~~The anti-fusogenic peptide-albumin conjugate of claim 90, wherein the linking group comprises polyethoxy-amino acids.~~

92. (Cancelled) ~~The anti-fusogenic peptide-albumin conjugate of claim 91, wherein the linking group is (2-amino)ethoxyacetic acid (AEA) or [2-(2-amino)ethoxy]ethoxyacetic acid (AEEA).~~

93. (Previously presented) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein the maleimide containing group is attached to the peptide without a linking group.

94. (Previously presented) The composition of claim 19, wherein the maleimide containing group is maleimidopropionic acid (MPA) or gamma-maleimide-butyralamide (GMBA).

95. (Currently amended) The composition of claim 19, wherein the maleimide containing group is attached to the peptide via a linking group the (2-amino)ethoxyacetic acid (AEA) or the [2-(2-amino)ethoxy]acetic acid (AEEA) linker.

96. (Cancelled) ~~The composition of claim 95, wherein the linking group comprises polyethoxy-amino acids.~~

97. (Cancelled) ~~The composition of claim 96, wherein the linking group is (2-amino)ethoxyacetic acid (AEA) or [2-(2-amino)ethoxy]ethoxyacetic acid (AEEA).~~

98. (Previously presented) The composition of claim 19, wherein the maleimide containing group is attached to the peptide without a linking group.

99. (New) The anti-fusogenic peptide-albumin conjugate of claim 1, wherein the peptide exhibits anti-viral and anti-fusogenic activity by modulation of a viral-cellular fusion process involving a coiled-coil peptide structure.

100. (New) The composition of claim 19, wherein the peptide exhibits anti-viral and anti-fusogenic activity by modulation of a viral-cellular fusion process involving a coiled-coil peptide structure.